

Extender Wall Mount Series

VGA Line Drivers with Audio for Wall Mount Applications



COMMON FEATURES

- Inputs: Female 15-pin HD and 3.5 mm mini stereo jack
- Outputs: Female BNC and captive screw connector
- 300 MHz (-3 dB) RGB video bandwidth
- Compatible with VGA-QXGA resolutions
- Three-position peaking/gain control helps maintain video signal integrity over long cable runs
- Active PC audio interfacing converts unbalanced audio to balanced line level audio
- Restores low level sync to TTL level
- ID bits terminated on pins 4 and 11
- Dual color LED power indicator
- External universal power supply included, part # 70-055-01

DESCRIPTION

The Extron **Extender WM Series** is a family of one input, one buffered output line drivers for sending high resolution VGA video and audio signals up to 250 feet (75 meters) through high quality cable, such as Extron MHR-5 Mini High Resolution Cable.

Extender Series line drivers provide video amplification and peaking to compensate for the voltage losses and high frequency attenuation that normally occur in long cable runs. A three position dipswitch lets the installer select the appropriate signal boost for various cable lengths, providing a more detailed image with greater contrast.

Each model also restores the low level sync voltages found on many laptops to normal TTL levels. This sync restoration prepares the signals for long cable runs and offers enhanced compatibility with a wide range of computers, display devices, and cable types.

Active audio buffering allows unbalanced PC audio to be converted to balanced line level stereo audio, eliminating noise usually associated with unbalanced audio when distributed over long cable runs.

For simple and versatile connections, video output is on five female BNCs on a three-inch (8 cm) pigtail, while audio signals are output on a captive screw connector. A 100-240VAC external power supply is included.

MOUNTING CONFIGURATIONS

Extender D

The Extender D mounts in an included Decora®-style wall plate and can be used with or without a one-gang electrical box.

Extender AAP

The Extender AAP is a stand-alone, double space AAP - Architectural Adapter Plate. Available in black, white, and RAL9010 white.

Extender WM

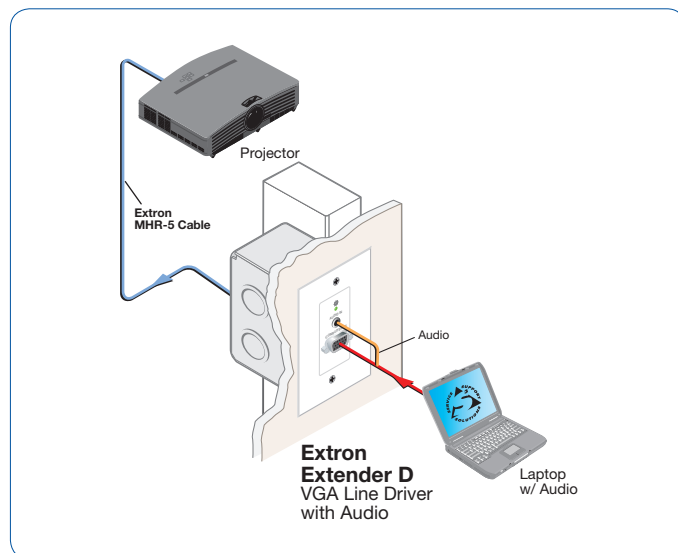
The Extender WM can be wall-mounted in a one-gang box and fits flush into a wall, podium, or table.

Extender WM AAP

The Extender WM AAP is similar to the Extender WM, but has four single space AAP openings. The Extender WM AAP can be wall-mounted in a three-gang box and fits flush into a wall, podium, or table.

Extender MK

The Extender MK fits flush within an electrical knock-out switch box, also known as an MK box, which is manufactured by MK Electric Company and frequently used in the United Kingdom, Singapore, and Australia. One version includes two faceplates, one black and one white. Another version is available in RAL9010 white.



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Extender Wall Mount Series

Extender D

VGA Line Driver with Audio for Decora®-style Wall Plate

UNIQUE FEATURES

- Mounts in an included Decora®-style wall plate
- Decora trim plate included



MODEL	VERSION DESCRIPTION	PART #
Extender D	Decora mount, White - 3" (8 cm) pigtails.....	60-759-22

Extender WM

VGA Line Driver with Audio for One-Gang Electrical Wall Box

UNIQUE FEATURES

- Wall-mountable in a one-gang box and fits flush into a wall, podium, or table



MODEL	VERSION DESCRIPTION	PART #
Extender WM	Black - 3" (8 cm) pigtails.....	60-398-12
Extender WM	White - 3" (8 cm) pigtails.....	60-398-22

Extender AAP

VGA Line Driver with Audio - AAP Version

UNIQUE FEATURES

- Installs in products that accept a double space AAP - Architectural Adapter Plate



MODEL	VERSION DESCRIPTION	PART #
Extender AAP	Black - 3" (8 cm) pigtails.....	70-147-12
Extender AAP	White - 3" (8 cm) pigtails.....	70-147-22
Extender AAP EX	Black - 18" (46 cm) extended pigtails.....	70-147-72

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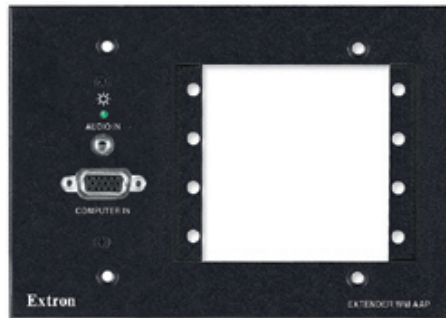
Extender Wall Mount Series

Extender WM AAP

VGA Line Driver with Audio with AAP Mounting Frame

UNIQUE FEATURES

- Wall-mountable in a three-gang wall box
- Opening for up to four single space AAP-Architectural Adapter Plates



MODEL	VERSION DESCRIPTION	PART #
Extender WM AAP	Black - 3" (8 cm) pigtails	60-405-12
Extender WM AAP	White - 3" (8 cm) pigtails	60-405-22

Extender MK

VGA Line Driver with Audio For Electric Wall Boxes

UNIQUE FEATURES

- Includes black and white faceplates
- Designed for mounting in a two-gang MK Electric type British Standard electrical wall box



MODEL	VERSION DESCRIPTION	PART #
Extender MK	MK - Black & White - 3" (8 cm) pigtails	60-406-12

Extender Wall Mount Series Accessories

OPTIONAL ACCESSORIES	MODEL DESCRIPTION	PAGE	PART #
MR 100	One-Gang Mud Ring, Black.....	page 821	70-519-12
MR 100	One-Gang Mud Ring, White	page 821	70-519-13
MR 300	Three-Gang Mud Ring, Black.....	page 821	70-519-32
MR 300	Three-Gang Mud Ring, White.....	page 821	70-519-33

Excludes use w/ "Extender D" model & "Extender MK" model

Extender Wall Mount Series

SPECIFICATIONS

VIDEO

Gain	0 dB, 0.6 dB, 1.2 dB, selectable (when input is 0.7 Vp-p, output is 0.7 V, 0.75 V, 0.8 Vp-p)
Bandwidth	300 MHz (-3 dB)

NOTE: ID bits are terminated (pins 4 and 11).

VIDEO INPUT

Number / Signal type	1 VGA-QXGA RGBHV, RGBS, RGSB, RsGsBs, component video, HDTV component video
Connectors	(1) 15-pin HD female
Nominal level	0.7 Vp-p for RGB
Minimum / Maximum levels	Analog: 0.3 V to 1.5 Vp-p with no offset at unity gain
Impedance	75 ohms
Horizontal frequency	15 kHz to 135 kHz
Vertical frequency	30 Hz to 170 Hz
Input coupling	DC

VIDEO OUTPUT

Number / Signal type	1 VGA-QXGA RGBHV, RGBS, RGSB, RsGsBs, component video, HDTV component video
Connectors	5 BNC female
Nominal level	0.7 Vp-p for RGB
Minimum / Maximum levels	Analog: 0.3 V to 1.5 Vp-p with no offset at unity gain
Impedance	75 ohms
DC offset	±5 mV with input at 0 offset
Return loss	<-35 dB @ 5 MHz

SYNC

Input type	RGBHV, RGBS, RGSB, RsGsBs, bi-level and tri-level component video sync
Output type	RGBHV, RGBS, RGSB, RsGsBs, bi-level and tri-level component video sync
Input level	2.0 V to 5.0 Vp-p
Output level	TTL: 5 Vp-p, unterminated
Input impedance	510 ohms
Output impedance	75 ohms
Max. propagation delay	18.8 ns
Max. Rise / Fall time	4 ns
Polarity	Positive or negative (follows input)

AUDIO

Gain	Unbalanced output: 0 dB; balanced output: +6 dB
Frequency response	20 Hz to 20 kHz, ±0.5 dB
THD + Noise	0.025% @ 1 kHz, 0.020% @ 20 kHz at nominal level
S/N	>90 dB at rated maximum output
Stereo channel separation	>75 dB @ 20 Hz to 20 kHz

AUDIO INPUT

Number / Signal type	1 stereo, unbalanced
Connectors	(1) 3.5 mm mini stereo jack
Impedance	>10k ohms unbalanced, DC coupled
Nominal level	-10 dBV (316 mVrms)
Maximum level	+6 dBV, (unbalanced) at 1% THD+N

AUDIO OUTPUT

Number / Signal type	1 stereo, balanced/unbalanced
Connectors	Extender WM, Extender WM AAP
Extender D	(1) 3.5 mm direct insertion captive screw connector, 5 pole
Extender AAP, Extender MK	(1) 3.5 mm captive screw connector, 5 pole
Impedance	50 ohms unbalanced, 100 ohms balanced
Nominal level	-2 dBu, balanced; -10 dBV unbalanced
Maximum level (Hi-Z)	+14 dBu, balanced, at 1% THD+N
Maximum level (600 ohm)	+6 dBm, balanced, at 1% THD+N

NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV = 2 dBu.

GENERAL

External power supply	100 VAC to 240 VAC, 50/60 Hz, external, universal; to 12 VDC, 1 A (max.), regulated
Power input requirements	12 VDC, 0.2 A
Temperature / Humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing

Rack mount

Extender AAP	No, but wall or furniture mountable with optional AAP mounting faceplates
All other models	No, but wall or furniture mountable in a standard U.S. electrical wall box
Enclosure type	Metal (Extender D has a metal faceplate and a plastic Decora wall plate.)

Enclosure dimensions

Extender AAP	
Faceplate	1.4" H x 3.5" W x 0.1" D (3.6 cm H x 8.9 cm W x 0.3 cm D) (double space high AAP plate)
Buffer	1.1" H x 2.75" W x 1.2" D (2.8 cm H x 7.0 cm W x 3.0 cm D) (*Height excludes BNC connectors and cables.)

Extender WM

Faceplate	4.5" H x 2.8" W x 0.1" D (11.4 cm H x 7.1 cm W x 0.3 cm D) (1 gang)
Buffer	2.7" H x 1.8" W x 0.75" D* (6.9 cm H x 4.6 cm W x 1.9 cm D*) (*Depth excludes BNC connectors and cables.)

Extender WM AAP

Faceplate	4.5" H x 6.4" W x 0.1" D (11.4 cm H x 16.3 cm W x 0.3 cm D) (3 gang)
Buffer	2.7" H x 1.8" W x 0.75" D* (6.9 cm H x 4.6 cm W x 1.9 cm D*) (*Depth excludes BNC connectors and cables.)

Extender MK

Faceplate	3.4" H x 5.7" W (8.6 cm H x 14.4 cm W) (UK knockout box size)
Buffer	1.1" H x 2.75" W x 1.2" D (2.8 cm H x 7.0 cm W x 3.0 cm D) (*Height excludes BNC connectors and cables.)

Extender D

Faceplate	2.6" H x 1.3" W x 0.1" D (6.6 cm H x 3.3 cm W x 0.3 cm D) (Fits the opening in a 1 gang Decora faceplate. *Height is 3.8" [9.7 cm] including mounting tabs.)
Buffer	2.7" H x 1.8" W x 0.75" D* (6.9 cm H x 4.6 cm W x 1.9 cm D*) (*Depth excludes BNC connectors and cables.)

Product weight

Extender AAP	0.2 lbs (0.1 kg)
Extender WM	0.2 lbs (0.1 kg)
Extender WM AAP	0.4 lbs (0.2 kg)
Extender MK	0.5 lbs (0.3 kg)
Extender D	0.2 lbs (0.1 kg)

Shipping weight

Extender AAP	2 lb (1 kg)
All other models	3 lbs (2 kg)

Vibration ISTA 1A in carton (International Safe Transit Association)

Listings UL, CUL

Compliances CE, FCC Class A, VCCI, AS/NZS, ICES

MTBF 30,000 hours

Warranty 3 years parts and labor

NOTE: All nominal levels are at ±10%. Specifications are subject to change without notice.